

CLAIMS

1. A system for playing a computer game, comprising a plurality of player apparatus for the input of user instructions and at least one game processing apparatus storing data defining a 3D game environment, wherein the player apparatus and the game processing apparatus are connected and information is transferred to enable each player to view the status of the 3D game environment and to control one or more objects therein, and wherein the system further comprises broadcast means for broadcasting data defining at least one view of the 3D game environment for receipt by a plurality of observers.
2. A system according to claim 1, wherein there is a single game processing apparatus having the form of a server to which each player apparatus is connected, and wherein object control signals are sent from the player apparatus to the game processing apparatus and information defining the status of the game environment is sent from the game processing apparatus to the player apparatus.

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14. ~~Apparatus according to any of claims 11 to 13,~~
wherein the means for generating broadcast data is
operable to generate and output data defining a plurality
of views for broadcast.

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15. Apparatus according to any of claims 11 to 14,
further comprising broadcasting means operable to
transmit data output for broadcast on a broadcast
channel.

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16. ~~Apparatus according to claim 15, wherein the~~
broadcast means includes data compression means operable
to convert data output for broadcast into a compressed
format.

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17. Apparatus according to claim ²¹~~16~~, wherein the data
compression means is operable to convert data into an
MPEG format.

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18. ~~A method of operating a computer graphics apparatus~~
in which is stored data defining a 3D game environment,
comprising:

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3. ~~A system according to claim 1, wherein each player~~
apparatus includes a game processing apparatus, and
wherein each player apparatus sends information to the
other player apparatus defining changes made to the game
5 environment by the player at that apparatus.

4. A method of operating a computer graphics system to
effect a computer game, which graphics system comprises
a plurality of player apparatus for the input of user
10 instructions and at least one game processing apparatus
storing data defining a 3D game environment, the method
comprising:

transferring information between the player
apparatus and the game processing apparatus to enable
15 each player to view the status of the 3D game environment
and to control one or more objects therein; and

broadcasting data defining at least one view of the
3D game environment for receipt by a plurality of
~~observers to enable the observers to view the game.~~

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5. ~~A method according to claim 4, wherein object~~
~~control signals are sent from the player apparatus to the~~

game processing apparatus and information defining the status of the game environment is sent from the game processing apparatus to the player apparatus.

5 6. A method according to claim 4, wherein, in the computer graphics system, each player apparatus includes a game processing apparatus, and wherein information is exchanged between the player apparatus defining the changes made to the game environment at each respective
10 player apparatus.

7. A method according to any of claims 4 to 6, wherein the broadcast data is broadcast on a television channel.

15 8. A method according to any of claims 4 to 6, wherein the broadcast data is broadcast on a channel defined at least in part by a communication network.

9. A method according to claim 8, wherein the broadcast
20 channel is defined at least in part by the Internet.

10. A method according to any of claims 4 to 9, wherein

the broadcast data is broadcast in substantially real time as the computer game is played.

Sub 85 11. ~~A computer graphics apparatus for use in a system~~

5 according to claim 1, comprising:

storage means for storing data defining a 3D game environment;

processing means for amending stored data in dependence upon player control of objects in the game environment; and

10 means for generating data defining at least one view of the game environment, and for outputting the data for broadcast.

15 12. Apparatus according to claim 11, further comprising means for outputting data defining change to the game environment for receipt by each player.

13. Apparatus according to claim 12, operable to generate and output data defining a respective view of the game environment for each player.

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~~updating the stored data in response to received~~
 signals defining player control of objects in the game;
 and

generating, and outputting for broadcast, data
 5 defining at least one view of the game environment.

19. A method according to claim 18, further comprising
 the step of outputting data defining change to the game
 environment for receipt by each player.

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20. A method according to claim 19, wherein data
 defining a respective view of the game environment is
~~generated and output for each player.~~

15 ~~21. A method according to any of claims 18 to 20,~~
 further comprising the step of broadcasting said data
~~output for broadcast on a broadcast channel.~~

20 ~~22. A storage device storing instructions for causing a~~
 programmable processing apparatus to:

update data defining a 3D game environment in
~~accordance with signals defining player control of~~

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objects in the game; and

generate and output for broadcast data defining at least one view of the game environment.

- 5 23. A signal conveying instructions for causing a programmable processing apparatus to:

update data defining a 3D game environment in accordance with signals defining player control of objects in the game; and

- 10 generate and output for broadcast data defining at least one view of the game environment.

24. A method of generating a broadcast signal, comprising:

- 15 receiving data defining a sequence of images of a 3D computer game environment in which objects are controlled by a plurality of players; and

~~broadcasting a signal conveying images of the game.~~

- 20 25. A broadcast signal conveying a sequence of images of a 3D computer game environment, in which the sequence of images shows control of objects in the game by players.

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26. ~~A method of making a recording of video data,~~
comprising:

receiving data defining a sequence of images of a 3D
computer game environment in which objects are controlled
5 by a plurality of players; and

recording, either directly or indirectly, data
defining images of the game on a storage device.

27. A storage device storing data conveying a sequence
10 of images of a 3D computer game environment, in which the
sequence of images shows control of objects in the game
by players.

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